PLANNERS News Letter

Apr~June 2018

Institute of Town Planners India, Telangana Chapter

1-10-198, Begumpet, Hyderabad, Telangana, Pin - 500016

करेंगे संग प्लास्टिक प्रदूषण से जंग | विश्व पर्यावरण दिवस | भारत 2018 | UN environment

In this Issue

National Town and Country Planners Congress — 2~4 February 2018

A proud moment for ITPI, Telangana Regional Chapter on successfully hosting and conducting the National Congress for the year 2018, and well attended by planners from all over the country to the registered participation of delegates to more than four hundred in number.

Two-day conference activities have been the highlight where the determined subject themes were discussed at length by dignitaries from Telangana Government and respective subject matter experts. The theme of the congress for the year 2018 had been 'Urban Environmental Planning: Consequences and Challenges' with the detailed schedules among the subject areas of 'Environmental Challenges of Urbanization' and 'Environment and Development Plans' along with the local sub-theme of 'Urban Flooding'.

On this occasion, an exhibition was organized for demonstration of people programs of Telangana Government by the respective departments. A heritage walk was also organized at the historic Goconda Fort by Telangana Regional Chapter, and it is expressed to be unique experience by delegates in knowing some of the engineering facts and the construction methods of that time.

This National Town and Country Planners Congress was sponsored by Municipal Administration and Urban Development Department and cosponsored by Greater Hyderabad Municipal Corporation, Hyderabad Metropolitan Development Authority, Telangana Housing Board, Telangana State Industrial Infrastructure Development Corporation, and supported by CREDAI and TREDA.

Urgency to Upgrade

World is trending to be more information centric in every aspect of life, either by science or engineering. Right sources of information and appropriation of use is becoming a critical feature of any successful program. This gets more analogous to planners in the respective domains to model the purposive use against applying comprehensive information for program designing of a functional process. Every facet of these acquired domains of purpose would constitute systems and sub-systems. There is a definite interface across all these systems to share information through well-defined integration. This evolves the automated information exchange among the collaborative systems across domains.

It is requirements coverage at each system and the information dependency for internal consumption or for sharing to other dependent systems. Since the information tend to maintain its' nature on shape and size, it is the responsibility of planner to get a better understanding of usability, and to evolve the methodology for well-integrated consumption by systems in process and schedules, since the necessity by systems to support the planning decisions on acquired knowledge.

The information applications are becoming complex and moving from simple arithmetic to machine learning, and further to deep learning, almost touching the way human thinking understands the relationships across information. Though it may take many decades to move towards the way symbolic reasoning by humans, the current information processing capabilities are at a very higher level of acceptability to domain data inferencing. This quarter News Letter covers the 'Student Page' to have been addressing to build such intelligence to planning.

Chairman's Desk

Hyderabad is a city of lakes and ponds which were originally meant for water storage and agriculture. Some of these lakes were in the urban agglomeration area, and along with the growth of the city, majority of the protected lakes have been now surrounded by intense urban activities on encroachments. Hyderabad Urban Development Authority has identified 169 tanks/ lakes within Hyderabad metropolitan area. Since the change in the metropolitan area redefinition under Hyderabad Metropolitan Development Authority, the survey needed to be extended further for updated information.

At least 18 of the lakes in the city to have been under protected development by 'National Lake Conservation Plan' (NLCP). The objective of the scheme is to restore and conserve the urban and semi-urban lakes of the country degraded due to waste water discharge into the lake and other unique freshwater eco systems, through an integrated ecosystem approach. For conservation of lakes and wetlands, Ministry of Environment and Forests (MOEF) has been implementing two separate Centrally Sponsored Schemes, namely the National Wetlands Conservation Program (NWCP) and the NLCP. The Ministry in Feb 2013, has merged the two schemes NLCP and NWCP into a new integrated scheme named 'National Plan for Conservation of Aquatic Eco-systems' (NPCA).

Most of the lakes in the city are in degraded/ eutrophied state due to various reasons. The residents surrounding these lakes call these as filthy ponds, unknowingly that they are also one among the parties. Hyderabad industrial growth is in north-western direction and mostly upper catchment to 'Musi River' basin. Geographically, city is caught-up with a huge collection of sewerage and industrial effluents from upstream (mainly chemical/ pharmaceutical), and the easiest way for illegal disposal is the lakes in their vicinity. Hussain Sagar, the pride of the city and with the major issue on water quality, and have become vulnerable of contaminants (*image in page 12*) with dangerous proportions on contact with the human food chain.

Under NLCP, 'Banjara Lake' is the only tank identified to be restored with an estimate of 4.3 crores of rupees in May 2009, but disbursed amount is only 82 lakhs of rupees as of Mar 2010, and a fraction of 20% in the estimate.

It always has been the responsibility of local government/ body for managing the urban lakes, though the existence of MOEF, NLCP, NWCP and now NPCA. Objectives from the local governments shall be stronger in protection and restoration of the urban lakes to bring them back to life and convert them to be among culture of the city. New dimensions of categorization with planned/ scheduled updates of data about the critical identities of water bodies needed to be formulated under the aegis of MOEF. We have come of the age where protecting the urban water bodies has become a big challenge. The new regulations shall define stronger defense for the urban lakes and to shield against the chaotic urban character with controlled/ parameterized classification and corresponding/ mandatory activities with consistent management efforts.

Mr. M. S. Reddy (*Former Secretary, Ministry of Water Resources*) and Mr. N. V. V. Char have done an elaborative study on management of lakes. The classification a lake itself is context specific with no organized parameters. There is no distinct composition of definition on urban water bodies with reference to statistical categorization in India. It is not alone the location and protective boundaries but also shall be inclusive of water quality guidelines by Central Pollution Control Board against the vulnerability across all seasons, which is composed broadly by five variants in chemical properties.

As a suggestive, the governance shall be through a separate and locally constituted statutory authority for dedicated management activities.

Leader's Talk

Sri. K. T. Rama Rao, Hon'ble Minister for IT, Municipal Administration and Urban Development, Industries and Commerce, Public Enterprises, Sugar, Mines and Geology, NRI Affairs — Government of Telangana.

Addressed the delegates at 66th National Town and Country Planners Congress on 2nd Feb' 2018, and following excerpts from the speech.

More Planning education;

"There being only one School of Planning in Telangana, Jawaharlal Nehru Fine Arts and Architecture University, Hyderabad while other states have a number of Schools of Planning. There is a need to start new schools of planning in Telangana, and assure that Telangana would be able to absorb 100 new students of planning for training so that after completion of their training they could be appropriately placed. The knowledge obtained from planning schools needs to be translated directly on ground, accordingly planning education should be continually reoriented with changing times."

Urbanization in Telangana;

"After the creation of the state of Telangana, 21 new districts have been created and at present there are 31 districts. The state has 6 new urban development authorities. In Telangana there are more than 72 urban local bodies, which will encourage level of urbanization in the state. Rural areas having more than 15,000 population will be declared as urban areas. Newly created local bodies are more organized than Gram Panchayats, where haphazard and unauthorized developments are taking place, specifically in those Gram Panchayat area that are situated in peripheries of large urban areas."

Hyderabad, a concentrated economy;

"It is not possible to stop urbanization because people from rural areas will continue to migrate to urban areas specifically to mega cities. The capital city of Telangana, Hyderabad generates 45 percent of GDP and has become a global city due to information technology based businesses. Besides, economic growth of the state has been placed on a fast track. Thus, urbanization also brings prosperity and economic growth, and so opportunities and challenges come together. Let us not see urbanization as a curse but try to explore and enhance benefits of urbanization."

Urban infrastructure challenges;

"In the mega cities, developers are focusing on front elevations of buildings, which appear very attractive from the outside, but inside buildings there are deficiencies of infrastructure, and improper hygiene and inadequate parking, due to which the surrounding areas find it difficult to park vehicles. Therefore, Government of Telangana is trying to constitute Building Tribunals to resolve these building issues."

Process of building permissions;

"Lakes and parks are required to be conserved by reforming land revenue system because several existing lakes are diminishing in Hyderabad due to the system of 'Shikampatta'. TDR policy could be liberalized by giving additional TDR, say up to 400, for surrendering encroached lake land. Department of Town Planning is not being liked by some people and other unscrupulous elements because of strict observance and enforcement of building byelaws to regulate development. Approval of building plans consumes a lot of time of planners, which is why online system of granting building permission is started by Government of Telangana since June' 2016 and offline applications are not encouraged any longer. As per present regulations, building permission process is required to be completed within 30 days. However, in certain cases applications are rejected in the third week, thus the approval period is reduced to 21 days and if the plans are not approved within 21 days, a 'deemed clause' would come into force. Therefore, if there are any shortfalls in application of an individual, the same is required to be notified by the concerned department in the first week of receipt of the application. Government may also consider levying penalty of ₹ 1,000 per day to the concerned officer responsible for the delay."

Control on urban irregularities;

"Unauthorized construction, taking place in Hyderabad and anybody who builds space more than what is permissible as per development regulations and master plan provisions, that illegally constructed space should be handed over to state government. Taking this into consideration, the state government would bring about reforms along with stringent punitive action for violating building byelaws."

Actions on urban flooding;

"A study carried out by Kriloskar in 2006 to improve drainage system in Hyderabad, and demolition of 21,000 structures was suggested to channelize water during rainy seasons, which appears to be quite harsh and impossible because Hyderabad is democratically governed where decisions are taken in consultation with peoples' representatives, and proposals should be practical and people friendly so that the same could be sensitized for laws and rules."

Is CSS Leading the Democratic Transportation Planning?

A. *Srirami Reddy*

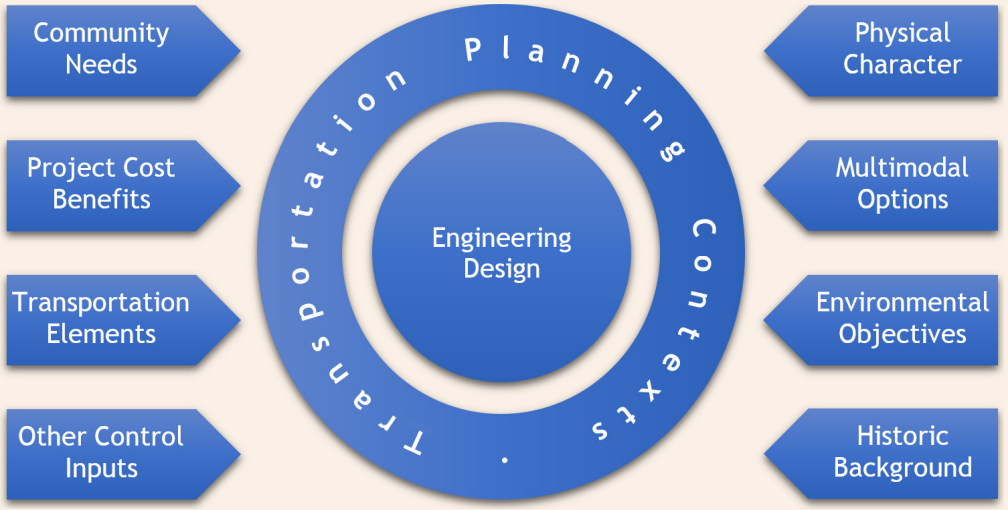
The transportation planning is reshaping the ways of applications, and due to drastic changes in technology and its' public adaptation. Since the advent of new transport variants of autonomous mode, levitation, etc., the practices and approaches have come of the age for making the plans more participant acceptable. Context Sensitive Solution (CSS) is discussed widely by Federal agencies to strengthen the emphasis on transportation planning to be truly a multi-disciplinary practice.

Since the days the CSS characterized at the conference of 'Thinking Beyond the Pavement' in 1998, the target of integration timeframe within all the State Departments of Transportation is mandated by Federal Highway Administration of USA till September 2007 with three vital goals of i) safety, ii) environmental stewardship and streamlining, iii) and congestion mitigation. Application of principles to transportation processes as following,

- Emphasis on decisions with highest stakeholder involvement.
- Knowledge of the contexts to be comprehensive.
- Genuine communications across stakeholders in establishing a better collaboration.
- The transportation solutions to focus on community development while preserving natural environments.

Incidentally, the National Urban Transport Policy (2014) by Ministry of Urban Development, Government of India have developed similar kind of policies. The traces of CSS look indirectly inferred through the vision of the policy,

- To recognize that people occupy center-stage in our cities and all plans would be for their common benefit and well-being.
- To make our cities the most livable in the world and enable them to become the 'engines of economic growth' that power India's development in the 21st century.
- To allow our cities to evolve into an urban form that is best suited for the unique geography of their locations and is best placed to support the main social and economic activities that take place in the city.
- To encourage growth of urban transport along low carbon path.



Hyderabad Metropolitan Development Authority also developed varied experiences while building Outer Ring Road (ORR) around Hyderabad city, from December 2005 till date. It is constituted for execution with the variety of project goals of i) eight lane orbital express way ii) two lane service roads on either side of ORR, iii) 33 radial roads including State and National highways as typical connectivity between inner ring road and ORR and iv) one-kilometer width controlled buffer zone on either side of ORR with the definite objectives of,

- Provision of quick access to connect to various urban nodes in State and National highway network.
- Bypass the through traffic on the State and National highways to avoid commercial traffic in the city.
- Reduction of congestion in the municipal corporation area and on inner ring road.
- Reduction of overall pollution in the city and to promote urban environmental up-gradation.

ORR project was planned and executed much earlier than the 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013', but riddled with many obstacles about land availability, people acceptability, environmental clearances, etc.

The project required land acquisition of about 485 hectares and involuntary resettlement of 54 households in accordance with the then prevailing policy by Andhra Pradesh Government.

The Environmental Impact Assessment (EIA) report had been prepared in May 2006 and approved by the Andhra Pradesh Pollution Control Board in October 2006. Most of the ORR project area is surveyed as either unused land or rainfed agriculture, but where declared forest land was acquired, equal replacement of afforestation expected to be accomplished under an agreement by the then Andhra Pradesh Forest Department.

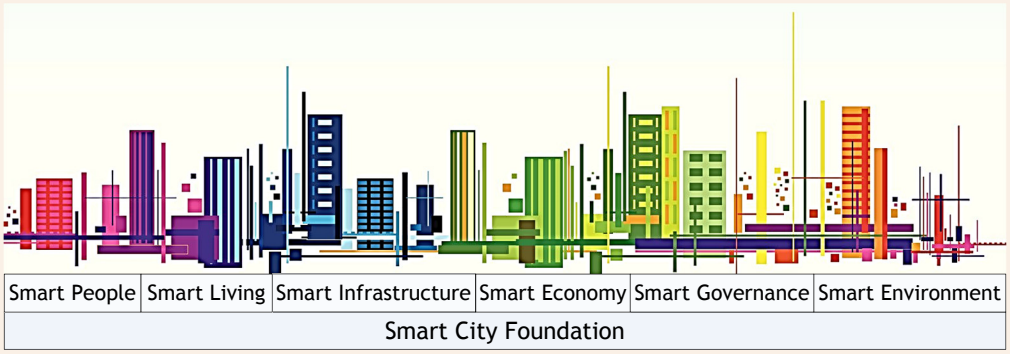
Total Length	158 KM.
Design Speed	120 KMPH.
Right of Way	150 M.
Hard Shoulder	3 M. Wide.
Width of Central Median	5 M. Wide.
Interchanges	19 Points.

Knowingly or otherwise, CSS partially was in practice as a viability check on transportation projects in India to uphold the democratic values and people centric development with appropriate participation. CSS in its' completeness of contexts may deliver much better results in the future.

The Myth of Smart Cities

K. Ravi Kumar Reddy

A smart city works on building an efficient and interactive city through connected participation of its' citizens. Transformation to a smart city brings the operability of utilities, housing, education, transportation, communications etc. through

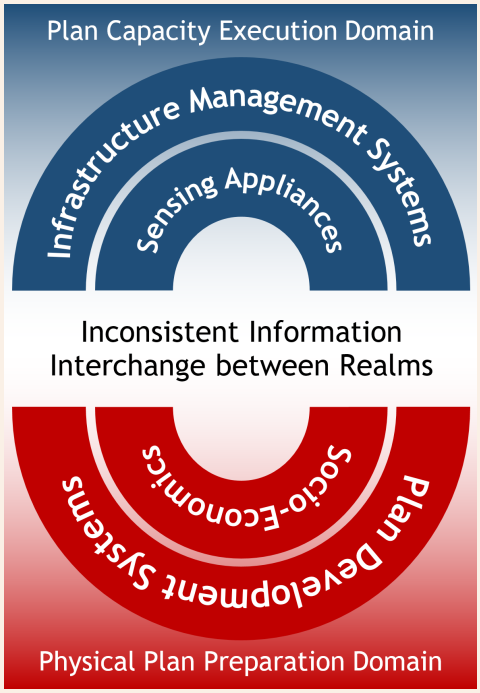


interconnected delivery model to citizen acceptability. Civic administrators use this modeled behavior of city infrastructure to take automated/ semi-automated/ manual decisions to facilitate the opportunities to a smart way of distribution methods. And the derived model of such delivery is never constant, but influenced by various factors, thus the model be self-learning for smart delivery every time.

The communication system is the key ingredient of a smart city program to bring all the diverse nature of urban systems to behave to the active smart delivery model, and this ought to be people-centric where communications systems are only the tool for connected appraisal. The underlying application systems can assess a situation holistically, and enable the urban systems to be ready for performing the situational awareness. The data being processed across the facility sub-systems is shared in a seamless integration, and available for observations in realtime or near-realtime spatial decisions since the facilities are location intensive. This is meant to achieve improvements in the quality, performance and efficiency of everything that is in the construct of urban management systems.

There are many ways the data is inferred for purpose of efficiency thus making the model behavior more dynamic in nature. The modeling of such in a city scale is very complex, and requiring a very high aptitude in analyzing and mimicking the outcome by data scientists before the systems are integrated for operations.

The smart city model maintains a deep intrinsic control on urban systems and their subordinate systems, whether central or subsequent zonal in the spatial boundary of the city. The segregation of such shall address the micro requirements of city smartness at a local or facility interference boundaries, thus addressing the specific goals and challenges at lowest possible and organized levels of beneficiaries on facilities.



All these smart city performance is indicated to be functional on baseline urban plans — namely, the master plans, development plans, perspective plans, advocacy plans, etc. The relationship between urban facilities management and the urban plans is highly disconnected and the interface is very much fragile.

Currently, the infrastructure management applications (Ex. Transportation Management Systems, Waste Disposal and Treatment Systems, Citizen Grievance Systems etc.) are truly isolated and managed within the scope boundary of known limitations, and at any point of situation handling, the integrated management at the central command is expected to deliver information to respective systems to respond. The advantage delivered by command center is merely to track the issue for escalations through executive hierarchy. The decisions at the central command may well be biased due to missing intelligence of advocated plans in the jurisdictional area for problem resolution, may also lead to false positive or false negative inferences with lopsided orientation which may grossly disturb the urban fabric and efficiency of infrastructure delivery.

Only the integration to the planned resources may help build a competent infrastructure and citizen services delivery model through smart cities, and the plan making also needing to evolve to the demands of efficient/ extensive information exchange. The interfaces for bidirectional data sharing/ flow are not only to help the efficacy in aligning the infrastructure based services to citizen needs but also be the feedback for plan changes.

It is a greater emphasis on 'physical plan preparation domain' to be information rich and affirmative to corresponding legal data sources that are at the disposal for not only the town planners and respective organizations but also other north bound applications of 'plan capacity execution domain', the smart cities.

Pervasive Urbanization and Progressive Infrastructure

S. V. R. Krishna Prasad

Urbanization induces infrastructural development as a result of the supplementary demand created for both capacity expansion and quality improved delivery of services. The infrastructural development in return propagates further processes of urban growth, and both these subject areas are synonymous to each other in preparing the development plans and execution policies/ methodologies.

The Ministry of Urban Development defines the urban infrastructure as – provide decent quality of life to residents, and promising clean and sustainable environment by applying smart solutions in the domain of sanitation, waste management, public transport and governance.

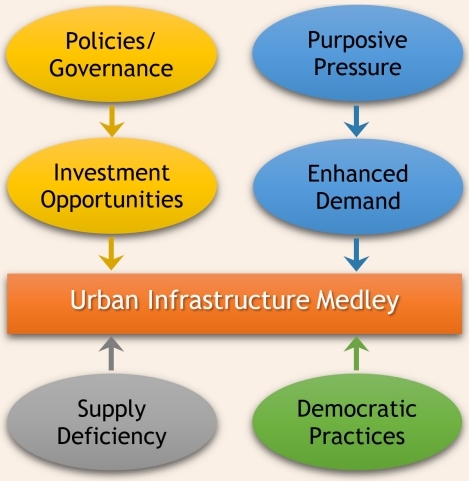
India, infrastructure considered as a pace setter for growth and one of the most important determinants for economic development. It affects economic development through demand side and supply side. In the demand side, it opens the possibilities of investment by making availability the necessary inputs and service. On the contrary, supply gives emphasis on development of infrastructure that helps in mobilizing potential saving and translating into productive investment.

Massive urban growth has led to complex problems of inadequacy of basic urban services. Urban population of about 21% find their room in squatter settlements where access to the basic services is very poor or very substandard, and 80% of population living in urban areas though has access to safe drinking water but there are severe deficiencies about equitable distribution of services. As per estimates, about 46% of household have water borne toilets while only 36% are connected to public sewerage system. Almost half of the solid waste generated in cities/ towns remain uncollected for days. The urban roads are inadequate to meet the growing transport demand which in turn leads to traffic congestion.

The infrastructure development is not keeping pace with rate of growth in urbanization. The ULBs/ Municipal Corporations are unable to cope up with the increasing demand of providing quality urban services in towns and cities due to lack of resources (TCPO, 2003). The escalating demand for basic services, coupled with the widening socio-economic divide between the rich and the poor has resulted in a serious deterioration of access and service quality across all urban service sectors (TERI, 2009). India's growing cities and towns face major challenges in creating adequate infrastructure including the transportation, communications, solid waste, water, and electricity (World Bank, 2006). A recent survey conducted by the National Institute of Public finance and Policy (NIPFP) shows that in a sizeable number of urban centers, the availability of water is even less than 100 liters per capita per day, and only 2.7% of sample municipalities are reported to have been supplying over 100 liters of water per capita per day (NIPFP, 2000).

India's infrastructure is a growth story and clearly recognized as a national priority. Over the past four years, the Indian economy consistently recorded growth rates in excess of 8.5% per annum resulting in rapidly increasing infrastructure spending. The focus of the Indian Government is on developing roads, railways, bridges, mass housing, power and healthcare facilities. Indeed, the Planning Commission had estimated the investment required for infrastructure would approximately be € 350 billion during the 11th Five Year Plan period (2007~2012). The construction sector alone has contributed to Indian GDP with an increase from 8% to 8.5% in 2006-07 and 2007-08 respectively. This has become the key component of the economic growth and creates multiple other opportunities for several tertiary sectors in mining, steel, cement, and construction equipment, etc.

India would need USD 4.5 Trillion by 2040 for infrastructure development, Economic Survey 2018. Current trend indicates to harvest about USD 3.9 trillion, and would still be a deficit on investments. The cumulative figure for India's infrastructure investment gap would be around USD 526 billion by 2040. The global infrastructure investment outlook shows that the gap between required infrastructure investment and current trend of investments to widen further.



Historically, infrastructure sector had been a savior in stabilizing the economy against global financial crisis and economic slump. In India, the infrastructure sector currently accounts for 26.7% of India's industrial output and thus remains a useful tool to balance the economy. According to Assocham Ernst&Young study – infrastructure, including roads, power, highways, airports, ports and railways, have emerged as an asset class with long term growth that can provide relatively stable returns to investors. India's problems are due to rapid increase in urban population, deterioration in the physical environment and quality of life, choking roads, lack of mass transit systems, and solid waste management. There is a wide gap between the demand and supply of essential amenities, services in urban infrastructure. The opportunities are huge for the private sector engaged in the infrastructure delivery and management, and the investments on these public amenities offer a strong growth potential.

Heritage Scape

James Street Police Station, 116-year-old heritage building, for many decades defined the urban aesthetic quotient of bustling Mahatma Gandhi Road (formerly James Street) as a symbolic landmark. The clock stopped at 1:10, not sure during day or night but witnessing the embarked glory, was gifted in 1900 by Diwan Bahadur Ramgopal Seth, a Rajasthani financial trader who made big fortunes in Hyderabad. Commemoratively, the area is named after the trader as Ramgopalpet and is still a hub of trade and business.

Image Courtesy: University of Washington

On 23rd Mar. 1998, the government of Andhra Pradesh designated this building as a heritage structure. GHMC on 23rd Sept. 2016 issued a notice to the inhabitants asking them to vacate the premises as it was in a dilapidated state and may collapse any time.

Heritage conservation groups described that around 15 per cent of nearly 140 heritage buildings in Hyderabad and its' outskirts are in a dilapidated condition and require immediate intervention of the authorities. Activists are also demanding that all heritage buildings should be handed over to a trust formed on the lines of the 'Nation Heritage Trust' of UK, with both NGOs and representatives of the government on board.

The Heritage Protection Law

The Telangana Legislative Assembly has passed the Telangana Heritage (Protection, Preservation, Conservation and Maintenance) Act, 2017 aimed at securing the heritage structures across the State, as against the previous regulation (Regulation 13) made under the Hyderabad Urban Development Authority's zoning regulations confining the operation to few buildings located in the State capital. The 'Regulation 13' was found inconsistent with the Telangana Urban Areas (Development) Act of 1975 and had to be depleted two years ago. In respect of the new Act, Government would constitute a State level 'Telangana State Heritage Authority' with the Chief Secretary as chairman and Archaeology and Museums director as member convener, and similar with the district-level heritage committees.

"Act No. 22 of 2017: an act to provide for the conservation, preservation, restoration and maintenance of tangible and intangible heritage of Telangana and for the matters connected therewith and incidental thereto" says the promulgated act in segregating two major expressions in understanding heritage,

'Tangible Natural Heritage' includes the features consisting of physical and geological formations, history, art or natural beauty, monuments, sculpture, paintings, elements or structures of an archaeological nature, inscriptions and cave dwellings. 'Intangible Cultural Heritage' includes practices, representations, expressions, as well as knowledge and skills (including instruments, objects, artifacts, cultural spaces etc.).

Student Page

'A Master Plan is the long-term perspective plan for guiding the sustainable planned development of the city. This documentation lays down the planning guidelines, executive policies, regulatory development code and trending space requirements for various socio-economic activities supporting the city population during the plan period. It shall also prepare the basis for all infrastructure requirements.'

Master plan preparation for Delhi was started in 1962 (MPD-62), revised once for 2001 (MPD-2001), and planning process is continuous for preparation (MPD-2021) till National census year of 2021. A gazette notification was issued for accommodating objections and suggestions from public on 16th Mar 2005 for the released draft document. MPD-2021 is mandated to be in line with the guidelines provided by Ministry of Urban Development during 2013. The challenge to synchronize the data across such a complexity and size is a challenge, i) influence of MPD-62 on MPD-2001, ii) revised trends from MPD-62 to MPD-2001 and subsequent influence on MPD-2021 and iii) basis for baseline assessment on the MPD-2021. It is tough to balance the variations in the data in both as depreciated status and change in types against time, and tradeoff influenced approximation is expected to lead to uncanny results.

Metropolitan Development Plan (MDP) of 2031 is an effort by Hyderabad Metropolitan Development Authority to integrate previous master plans from i) Hyderabad Development Authority, ii) Hyderabad Airport Development Authority, iii) Cyberabad Development Authority, and iv) Outer Ring Road Growth Corridor. If the merger is seamless, the knowledge on references would be quite complex, since the other master plans are independent by philosophy and purpose. The rational for merger from the data belonging to different time scales and multiplexing is an additional issue for analysis and composite decisions.

Master plans has been a succession (Ex. 1956, 1970, 1983) for the city of Cairo (Egypt) due to ever changing dynamics in urban activities, and the planning process is determined with optional approaches in the plan alternatives in each master plan cycle.

It is the master plan for Jemshedpur perceived to be updated on regular basis with no defined horizon year. It is not an easy task though, the emphasis is on ever changing requirements of i) decentralization, ii) balanced distribution of infrastructure services and iii) effective governance.

By way of an alternative for interactive planning purposes, digital master planning started out as a knowledge transfer project called smart solutions for spatial planning in collaboration with the University of East London (UEL) Centre for Evolutionary Computing in Architecture (CECA). Algorithmic representations and quantitative analysis are the Planning decision simulations. This is needing accessibility to all stakeholder actions based on the context of change.

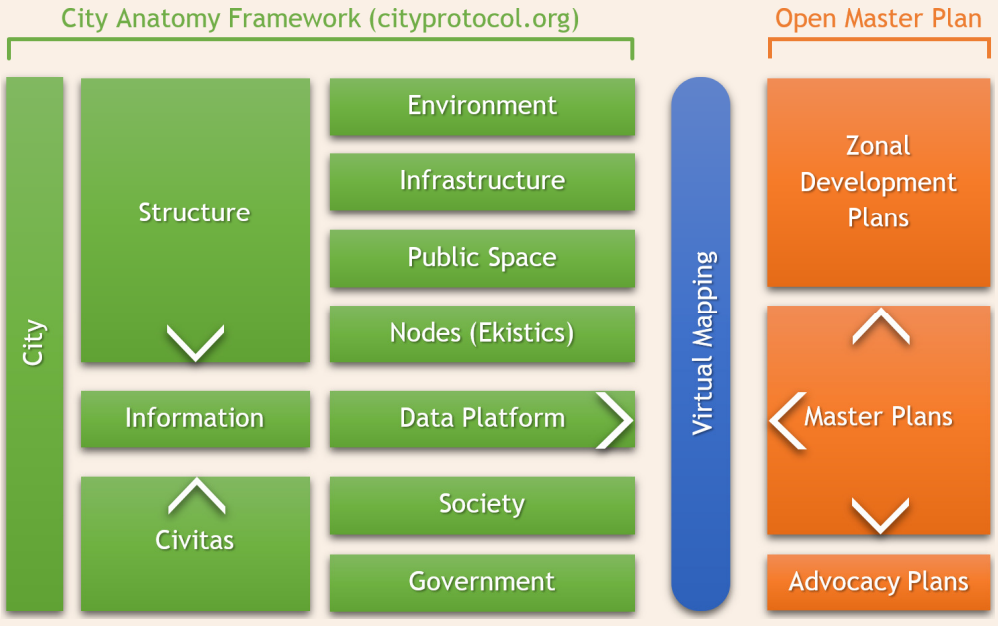
General misconception on the use of GIS, a fairy tale, is not an answer for many problems in draft preparation and management of master plans. This is only supportive to convert the paper reproduced maps into digital master plans, with the inventory/ properties of land parcels, development zones etc. without temporal sensitivity.

Next level is the transformation of digital master plan to active state, 'Open Master Plan', by introducing the required interfaces and use of latest legal data. This requires various departments responsible for supply of source data to be based on integration protocols for every virtual interface.

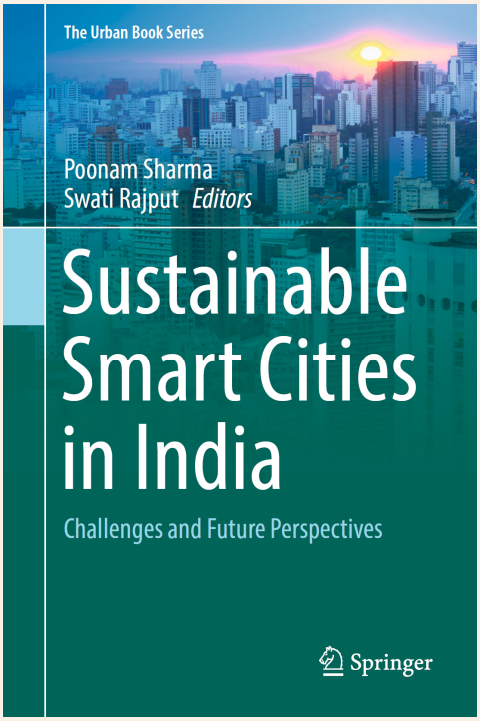
There may be three types of interfaces and many negotiating protocols,

1. Planning Professionals: The role of planners is to create dynamic models for analysis across data and transformational processing to application on plans.
2. Source Data: It is essential for the plan preparations and required to be owned/ managed by respective stakeholders and with digitally committed signature, so the master plan can use the same as the latest and scheduled data for analysis.
3. People: This is a critical most requirement for permitting access to the people about decisive updates/ changes performed by planners on master plan. Using multiple types of end-user device privileges, a secured portal may be provisioned for the estimated city capacity to citizen access.

[Open Master Plan, thesis for partial fulfillment of M. U. R. P. by Sravan Kumar Dindi, 16011PA023, 2018, J. N. A. & F. A. U., Hyderabad.]



Book Review



Sustainable Smart Cities in India — Challenges and Future Perspectives, Springer International Publishing, 2017.

This book presents fundamental and applied research aimed at the development of smart cities across India. Based on the exploration of an extensive array of multidisciplinary literature, this book discusses critical factors of smart city initiatives: management and organization, technology, governance, policy, people and communities, economy, infrastructure, and natural environs. These factors are broadly covered under the integrative framework of the book to examine the vision and challenges of smart city initiatives. The book suggests directions and agenda for smart city research and outlines practical implications for government bodies, professionals, students, research scholars and policy makers.

A lot of projects are underway on smart cities in India which is exposing plenty of potential for research on urban studies. At international level, and even in India, the concept of smart cities is a progressive topic at various universities, research organizations, government ministries, urban infrastructure departments, civic bodies, environment, energy and disaster organizations, town planners and policy makers. This book provides ideas and information to government officials, investors, experts and research personnel.

The 'Chapter 2' discusses details on the infrastructure challenges in Indian cities, which are the core subject areas for design manage the sustainability for dispatching the equal citizen rights on facilities. The argument on the infrastructure issues turn to influence urban environment, and the cyclic and concurred influence of these would logically derived as major lapses attributed to insufficient governance. Further, the discussion evolves the relationships among these and the emergence of the smart management approaches on urban infrastructure, environment and governance.

The information infrastructure is discussed in 'Chapter 3', but the focus is on building the support to NUIS (National Urban Information System being initiated by Union Ministry of Urban Development during 2006), and assessed for practicality and arguably the basis for connected urban communities, to have been from the awareness to the level of influencing the information. Questions now on to define the level in practiced use of information management which is centralized to purpose of smart city requirements and the extent of dependency to the needed data.

Tactical urbanism is argued to have been achieved by smart mobility, where the transportation is a feature that is dependent on other smart infrastructure dependencies.

Though the information access, management and use is important for a decisive smart city construct, the book does not address the methodologies to have been adaptive for smart city program implementation in an Indian urban information context, and missing empirical studies from ongoing.

Opinion

preventionweb.net: Whether or not disaster risk is factored into investment decisions in urban planning and development but will have a decisive influence on the future of risk reduction (UNISDR, 2013).

Inadequately planned and managed cities also create new risks which threaten to erode current development gains and sustainability for long-term economic cycle. The lack of adequate infrastructure and services can turn natural hazard into a disaster.

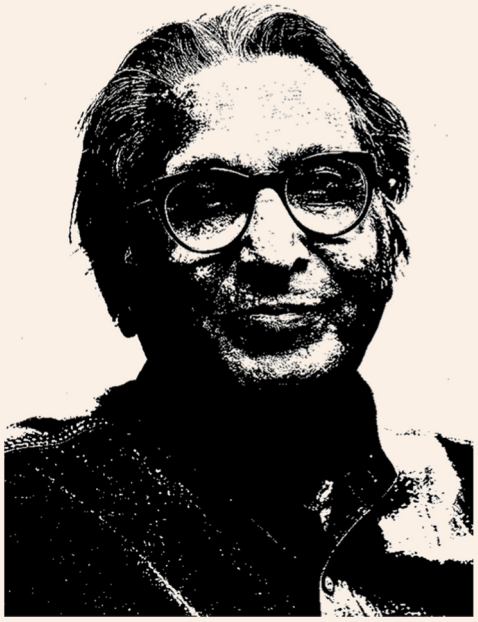
There is also the potential for the creation of man-made hazards through poor regulation of construction and industrial practices in urban areas, or inadequate provision of urban services.

During current urban planning and development, it is the fact that disaster risk is rarely an investment decision. Weak regulation, for instance the lack of enforcement of building codes, planning permission and regulatory investment, often linked to corruption, allow the transfer of risk from construction companies to those who live and work in the buildings (adapted from UNISDR, 2015a).

City regions are becoming increasingly exposed and are creating new patterns of localized intensive risk; at the same time, poorly planned and managed urban development has generated new hazards and extensive risk in the absence of mitigation (UNISDR, 2013).

The significance of this disaster risks is underlined by the fact that in 2012, 60% of the area projected to be urban in 2030 was yet to prepare the risk mitigation plans (UN Habitat, 2015). Disaster risk is increasing faster in rapidly growing small and medium sized urban centers than in either rural areas or larger cities (UNISDR, 2011).

By 2050, urban population exposed to cyclones and floods will increase from 310 million to 680 million while the exposure to major earthquakes across seismic faults on urbanized regions will increase from 370 million to 870 million (World Bank, 2013b).



Pritzker Prize

To honor a living architect or architects whose built work demonstrates a combination of those qualities of talent, vision, and commitment, which has produced consistent and significant contributions to humanity and the built environment through the art of architecture. The international prize, which is awarded each year to a living architect/s for significant achievement, was established by the Pritzker family of Chicago through their Hyatt Foundation in 1979. It is granted annually and is often referred to as "architecture's Nobel" and "the profession's highest honor."

Aranya, the Cited Project

The jury also have listed the selected works, and among the significant most project was Aranya Low Cost Housing by Indore Development Authority, and Agha Khan Award for architecture in 1996. This project is planned to inhabit over 80,000 individuals through a system of houses, courtyards and a labyrinth of internal pathways. The community is comprised of over 6,500 residences, amongst six sectors — each of which features a range of housing options, from modest one-room units to spacious houses to accommodate a range of incomes, aimed towards sustained community development across clustered urban living.

Recognition Matters

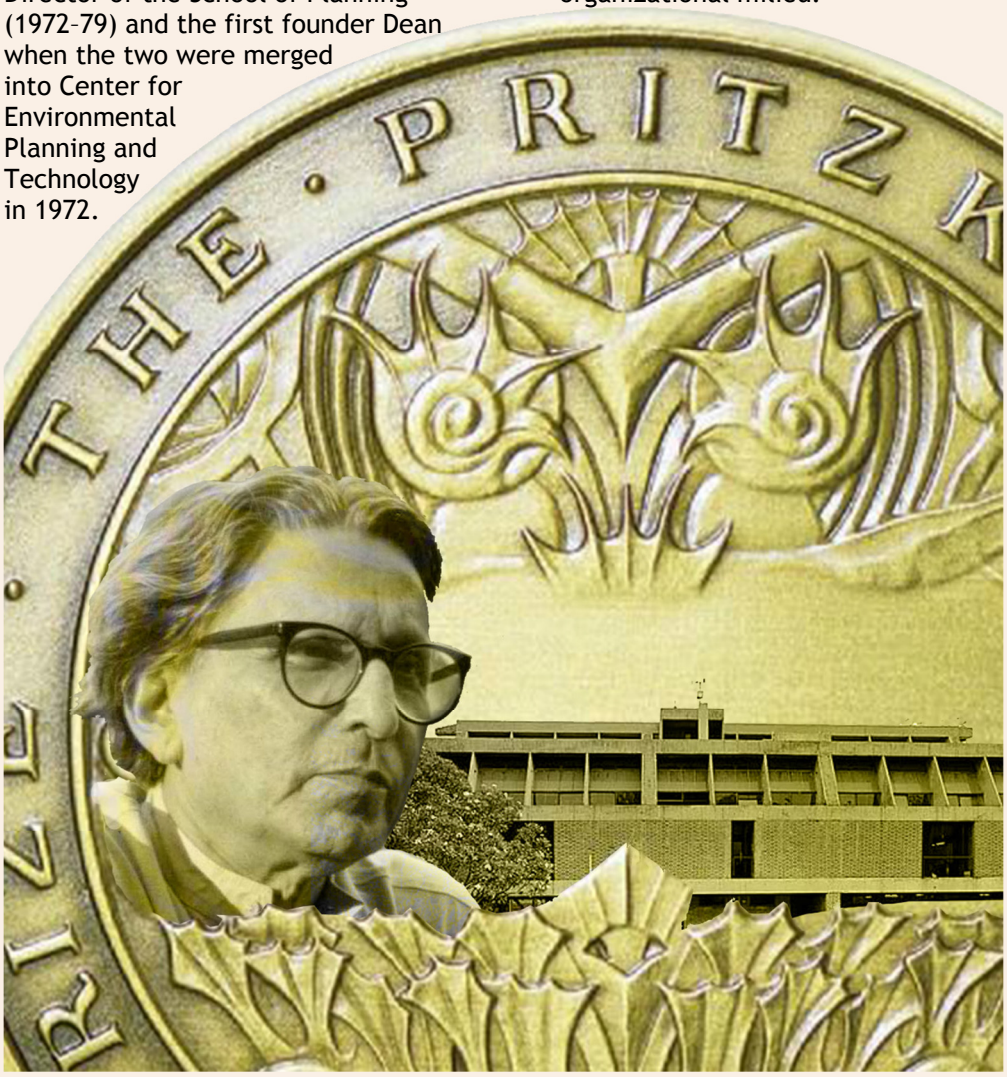
CEPT: The 7th of March marked a milestone in the history of CEPT when its' founder Balkrishna Vithaldas Doshi was announced as winner of the 45th Pritzker Prize, and the first Indian to receive this honor.

An architect, urban planner, and educator for the past 70 years, Doshi has been instrumental in shaping the discourse of architecture throughout India and internationally. Through modernistic ideals, his work reflects the essence of India. From the divinity of a temple to a socio-economic lifestyle, to the hot dry monsoon climate, the environment and its surroundings, Doshi has touched the details as well looked at the whole as a sum of its parts.

Founder director of the School of Architecture (1962–72), the first Director of the School of Planning (1972–79) and the first founder Dean when the two were merged into Center for Environmental Planning and Technology in 1972.

architexturez.net: The ideological basis for planning Aranya has been,

- Vitality — development to support socio-economic aspirations of the community.
- Imageability — built form to impart identity and inculcate a sense of belonging amongst the inhabitants.
- Equity — to create equitable balanced community with satisfactory level of environmental qualities and opportunities for all.
- Efficiency — to realize development that optimizes natural, material as well as human resources to the advantage of the user group.
- Flexibility — to evolve framework that absorbs with ease the progressive change and growth as a part of natural development process.
- Feasibility — to ensure development within given legal, fiscal and organizational milieu.



Editor's Choice

Reprint of 'Policy Implications' from United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision, (ST/ESA/SER.A/352).

As the world continues to urbanize, sustainable development challenges will be increasingly concentrated in cities, particularly in the lower-middle-income countries where the pace of urbanization is fastest. At the same time, cities offer opportunities to expand access to services, such as health care and education, for large numbers of people in an economically efficient manner. Providing public transportation, as well as housing, electricity, water and sanitation for a densely settled population is typically cheaper and less environmentally damaging than providing a similar level of services to a predominantly rural household. Urban dwellers also have access to larger and more diversified labor markets, and enjoy healthier lives overall.

Governments must implement policies to ensure that the benefits of urban growth are shared equitably and sustainably. The Rio +20 Conference outcome, "The future we want", recognized that cities can lead the way towards economically, socially and environmentally sustainable societies, but that a holistic approach to urban planning and management is needed to improve living standards of urban and rural dwellers alike. Sustainable urbanization requires that cities generate better income and employment opportunities, expand the necessary infrastructure for water and sanitation, energy, transportation, information and communications; ensure equal access to services; reduce the number of people living in slums; and preserve the natural assets within the city and surrounding areas.

Diversified policies to plan for and manage the spatial distribution of the population and internal migration are needed. History has shown that policies that aim to restrict rural-urban migration are ineffective at forestalling city growth, and can even produce economic, social and environmental harms. In recent years, a growing number of countries have been favoring other strategies for rural and urban development, such as allocating land rights, managing land use, land redistribution, creating regional development zones and promoting economic diversification and competitiveness in rural areas through the mobilization of investment and the improvement of rural livelihoods.

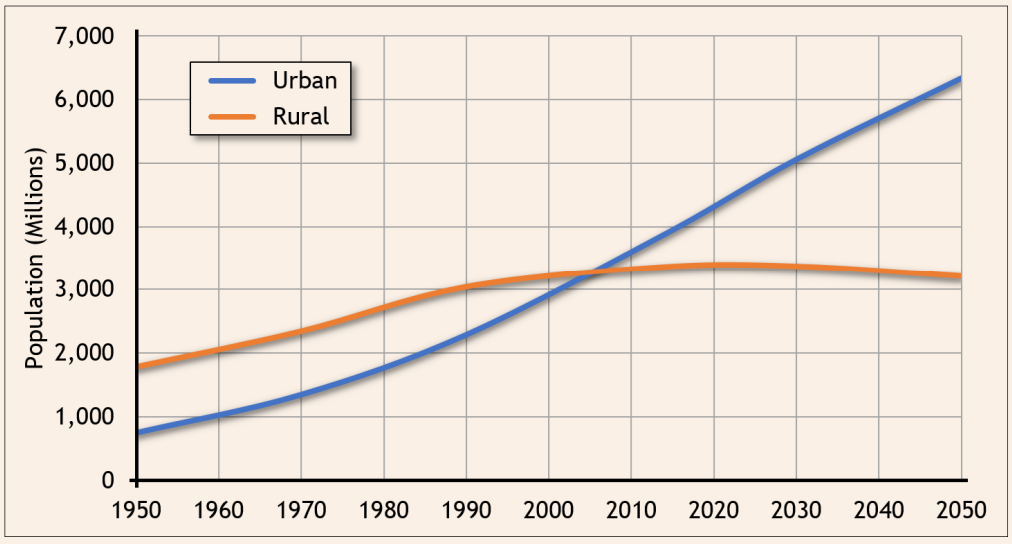
Policies aimed at a more balanced distribution of urban growth, avoiding excessive concentration in just one or two very large urban agglomerations within a single country, can also support sustainable development. These policies, as well as those promoting the growth of intermediate-size cities common in Latin America, can help to address the problems of excessive centralization of economic and administrative functions, while also responding to the challenges of providing urban infrastructure and basic social services for the urban poor, and mitigating the negative environmental impacts often associated with large and rapidly growing urban agglomerations.

Accurate, consistent and timely data on global trends in urbanization and city growth are critical for assessing current and future needs with respect to urban growth and for setting policy priorities to promote inclusive and equitable urban and rural development. In order to systematically track levels and trends in urbanization around the world and to monitor progress in sustainable development goals in urban and rural areas, Governments, with the support of international cooperation, should continue their efforts to produce more extensive and better-quality data on the size, distribution and characteristics of the population.

Successful sustainable urbanization requires competent, responsive and accountable governments charged with the management of cities and urban expansion, as well appropriate use of information and communication technologies (ICTs) for more efficient service delivery. There is a need for building institutional capacities and applying integrated approaches so as to attain urban sustainability.

Witnessing the Paradigm Shift

Globally, more people live in urban areas than in rural areas. In 2007, for the first time in history, the global urban population exceeded the global rural population, and the world population has remained predominantly urban thereafter. The planet has gone through a process of rapid urbanization over the past six decades. In 1950, more than two-thirds (70%) of people worldwide lived in rural areas and less than one-third (30%) in urban settlements. In 2014, 54% of the world's population is urban. It would just be 100 years for reversal of the composition ratios by 2050.



5th June, 'World Environment Day';

India is the host country at United Nations in 2018 for World Environment Day, and the theme is 'Beat Plastic Pollution' with the focus on combating the single-use plastic pollution. India traditionally had been the frontrunner of resource recycling for not alone the material but functional reassembly/ reusability too, 60% of plastic waste is recycled as compared to the world average of 22%, from the generated plastic waste of 15,000 tonnes per day. Sikkim has a success story promoted by UN in this global campaign, advocated complete ban on plastic usage over a decade now, but confronted with a bigger evil from the single-use polyethylene terephthalate (PET) bottles now, carelessly discarded by visiting tourists. Global plastic facts,

- Every year the world uses 500 billion plastic bags.
- Each year, at least 8 million tonnes of plastic end up in the oceans, the equivalent of a full garbage truck every minute.
- In the last decade alone, world produced more plastic than in that of whole last century.
- 50% of the plastic is single-use and dispose.
- World purchase one million plastic bottles every minute.
- Plastic makes up 10% of all the waste generated each year.

Members from Telangana Regional Chapter gathered for deliberations on the expected commitment towards stronger environmental stewardship on this occasion by planning fraternity.

- Ideas were invited from scheduled planning colleges/ schools for student participation on 'Beat Plastic Pollution'.
- Released a theme poster by design compliance to United Nations by Sri. Devendar Reddy, Chairman.
- Promotion videos prepared by UN on this global event were played for focused attention on plastic menace and environmental impacts.
- Talk on 'Urban Biodiversity' by Sri. K. Ravi Kumar Reddy, with focus on life at abiotic substrate which is in dire straits, a nature of imbalance.

New elected body for 2018~19

Sri. S. Devendar Reddy, Chairman.
Sri. K. Muraidhar Reddy, Secretary.
Sri. S. V. R. Krishna Prasad, Treasurer.
Sri. R. Nageswara Rao, Chairman, Building Committee.
Sri. K. Ravi Kumar Reddy, E. C. Member.
Sri. B. Suresh, E. C. Member.
Smt. Kalpana Raghavendra, E. C. Member.
Sri. M. Narasimharamulu, E. C. Member.
Sri. Md. Khalid Sarwar, E. C. Member.
Ms. Vasanta Sobha Turaga, E. C. Member.
Sri. Chilakala D. V. Prasad, E. C. Member.

...Picture bellow relates to Chairman's viewpoint from Page 2.

The excessive inputs of nutrient loads of phosphate and nitrate entering the lake through sewerage, leading to the growth of cyanobacterial algal blooms and aquatic weeds, made Hussain Sagar water body a eutrophic lake. Following collected readings reveal the state of physico-chemical scenarios.

Hussain Sagar: Physico-Chemical Parameters and Bacterial Count
Source: Water Science 31 (2017) 24-33

Parameter	Aug.2014	Sept.2014
pH	8.1	8.0
Electrical Conductivity (mS/cm)	1.57	2.8
Total Dissolved Solids (mg/L)	786.9	761.3
Chemical Oxygen Demand (mg/L)	353.2	115.5
Chlorophyll a (mg/L)	53.3	15.7
Heterotrophs (CFU/mL)	8.6×10^4	2.8×10^4
Total Coliforms (CFU/mL)	5.0×10^4	1.2×10^4
E. Coli (CFU/mL)	5.0×10^2	7.2×10^1
Ampicillin Resistant Bacteria (CFU/mL)	5.9×10^3	6.9×10^2
Gentamicin Resistant Bacteria (CFU/mL)	2.2×10^3	5.4×10^2

Image Courtesy: The Hindu (13th July 2012)

Published by K. Muralidhar Reddy, Secretary, ITPI Telangana Regional Chapter on behalf of Institute of Town Planners India, and Printed at Sri Venkateshwara Multi Colour Printers, 11-6-867/2, Redhills, Lakkdi Ka Pool, Hyderabad, Pin: 500004, and Published from 1-10-198, Begumpet, Hyderabad, Telangana, Pin: 500016, Telephone: +91-40-27765892.

Edited by K. Ravi Kumar Reddy.